JCO2 Rec'd PCT/PTO 24 JUN 2005

PTO-1390 (Rev. 02-2005)
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TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER 176/61442

U.S. APPLICATION NO. (If known, see 37 CFR 1.5) **CONCERNING A SUBMISSION UNDER 35 U.S.C. 371** INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED INTERNATIONAL APPLICATION NO. PCT/US2004/000093 02 January 2004 (2.01.2004) 02 January 2003 (2.01.2003) TITLE OF INVENTION HYBRIDIZATION-BASED BIOSENSOR CONTAINING HAIRPIN PROBES AND USE THEREOF APPLICANT(S) FOR DO/EO/US MILLER, Benjamin L.: KRAUSS, Todd D.; DU, Hui; CRNKOVICH, Nicole and STROHSAHL, Christopher M. Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. IXI The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). |X| has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). 7. X Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT 10. L Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. 🗓 An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. 15 l A substitute specification. 16. l A power of attorney and/or change of address letter. 17. l A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. A second copy of the published International Application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). Other items or information: UNSIGNED Combined Declaration and Power of Attorney.

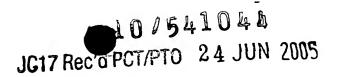
This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLICATION TO (kpovb) see \$7 (FR. 4.5)			INTERNATIONAL AF	INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
PCT/US2004/000093				4/000093	176/61442		
The following fees have been submitted					CALCULATIONS	PTO USE ONLY	
21. X Basic national fee\$300					\$ 300.00		
22. X Examination fee If Internal onal prefininary examinal on report prepared by USPTO and all claims salisfy provisions of PCT Article 33(1)-(4)					\$ 200.00		
23. X Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority					100.00		
TOTAL OF 21, 22 and 23 =					\$ 600.00		
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.							
Total Sheets	Extra Sheets		addifional 50 or fraction p to a whole number)	RATE			
77 _{- 100} =	-23 _{/50} =			x \$250	\$ 0.00		
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)).					\$ 130.00		
CLAIMS	CLAIMS NUMBER FIL		NUMBER EXTRA	RATE	\$		
Total claims		66 - 20 =	46	x \$ 50	\$ 2,300.00		
Independent claim		3 -3=	0	× \$200	\$ 0.00		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+ \$360	\$ 0.00		
TOTAL OF ABOVE CALCULATIONS =					\$ 3,030.00		
Applicant daims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					1,515.00	T	
SUBTOTAL =					\$ 1,515.00		
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).					\$ 0.00		
TOTAL NATIONAL FEE =					\$ 1,515.00		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +					\$ 0.00		
TOTAL FEES ENCLOSED =					\$	1,515.00	
					Amount to be	\$	
					refunded: Amount to be charged:	\$	
a. X A check in the amount of \$ 1,515.00 to cover the above fees is enclosed.							
b. Please charge my Deposit Account No in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.							
c. X The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-1138 . A duplicate copy of this sheet is end osed.							
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.							
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed							
and granted to restore the International Application to pending status.							
SEND ALL CORRESPONDENCE TO: Edwin V. Merkel					Deval		
Nixon Peabody LLP							
Clinton Square Edwin V. M					erkel		
P. O. Box 31051							
Rochester, NY 14603-1051 40,087					21111111122		
United States of America REGISTRATION NUMBI							



EXPRESS MAIL CERTIFICATE

DOCKET NO.: 176/61442

APPLICANT(S): MILLER et al.

TITLE: HYBRIDIZATION-BASED BIOSENSOR CONTAINING HAIRPIN PROBES AND

USE THEREOF

Certificate is attached to the Transmittal Letter to the U.S. Designated/Elected Office (DO/EO/US) of the above-named application.

"EXPRESS MAIL" NUMBER: EV652970449US

DATE OF DEPOSIT: June 24, 2005

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop: PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Shawn A. Lockett

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paper or fee)